IFW/2826



Docket No.: 3449-0570PUS1

(PATENT)

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of: Suk-Hun LEE

Application No.: 10/564,404

ophication No.. 10/304,40

Filed: January 13, 2006

For: NITRIDE SEMICONDUCTOR LIGHT

**EMITTING DEVICE** 

Confirmation No.: 1794

Art Unit: 2826

Examiner: Wilson, S.R.

### **LETTER**

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

Further to the Information Disclosure Statement filed on February 1, 2007, in the above-identified application, attached is a copied translation of an Office Action dated June 8, 2007, in the corresponding Chinese application. It will be noted from the Chinese Office Action that one (1) of the documents cited in the February 1, 2007, Information Disclosure Statement, i.e., KR-2002-0079659-A, was also cited in the Chinese Office Action.

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact James T. Eller, Jr., Reg. No. 39,538 at the telephone number of the undersigned below, to conduct an interview in an effort to expedite prosecution in connection with the present application.

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If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. §§ 1.16 or 1.17; particularly, extension of time fees.

Dated: August 30, 2007

Respectfully submitted,

James T. Eller, Jr.

Registration No.: 39,538

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TOUT KOI: FLATE-FU4-UUDCIN/DEOZUV4U6-UDCIN

Our Ref: IP051531P

# STATE INTELLECTUAL PROPERTY OFFICE OF PEOPLE'S REPUBLIC OF CHINA

Application No.:	2004800159493	Date of Notification:		
Attorney:	Jinwei GU, Jifu LIU	June 8, 2007	PATE	
Applicant:	LG INNOTEK CO., LTD.			
Title of the Invention:	NITRIDE SEMICONCUCTOR LIGHT EMITTING DEVICE			

# Notification of the First Office Action (National Phase of PCT Application)

	(Na	tional Phase	of PCT Application)	
invention und referred to as  The State Intelle	ler Article 35, Pi "the Patent Law	ara. 1 of the l ""). Office has de	Patent Law of the Peo	ve-identified patent application for ple's Republic of China (hereafter application on its own initiative
2. 🖾 The applicant cl	simed priority/pr	riorities base	i on the application(s)	;
41 4 L		ber 15, 2003	, filed with	on
iled with	on		, filed with	on
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provision of Rul	on,file e 51 of the Impl	ed by the ap ementing Re	plicant on	
application as file	ed.		to the Chinese trans	slation of original international
Specification			directed to Chinese	tree below:  text of international application ring Chinese national phase;
	page(s)	-		text of the Annexes of International
	page(s)		Article 41 of Patent	<del>-</del>
	page(s)		1 of the Implementing	ents submitted under Rule 51, Para, ag Regulations of the Patont Law.
•	page(s)	-		ents submitted on
☐ Claims			submitted when enter	e text of international application ring Chinese national phase; e text of amendments submitted
			directed to Chinese t	atent Cooperation Treaty. ext of the Annexes of International
			Preliminary Report o	f patentability;
			Article 41 of Patent (	

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			1 of the	to amendments submitted under Rule 51, Para. implementing Regulations of the Patent Law. to amendments submitted on	
	Drawings	page(s)	when en	to Chinese text of international application ering Chinese national phase;;	
		page(s)	Prelimin	to Chinese text of the Annexes of International ary Report of patentability;	
		page(s)	Article 4	to amendments submitted under Article 28 or 1 of Patent Cooperation Treaty; to amendments submitted under Rule 51, Para.	
		page(s)	1 of the I	mplementing Regulations of the Patent Law.	
		page(s)	directed	o amendments submitted on	
Ø		eference document examination proce		Action (the reference number will be used	
lo.	Number or Title of Reference			Date of Publication	
1		KR2002-00796	50 A	(or the filing date of conflicting application) October 19, 2002	
2		RX2002-00790	JAK	October 19, 2002	
	The specific	ation does not con	nply with Article 33 o	Para. 3 of the Patent Law.  f the Patent Law.  f Implementing Regulations of the Patent	
$\boxtimes$	On the Claims:				
·		8	do not have nove Patent Law.	ty required by Article 22, Para. 2 of the	
	Claim(s)		do not possess the 3 of the Patent Lav	inventiveness required by Article 22, Para.	
	Claim(s)		Pateni Law.	tility required by Article 22, Para.4 of the	
	☐ Claim(s)		-	e under Article 25 of the Patent Law. by with Article 26, Para. 4 of the Patent	
		(1, 24, 34-36)		Article 31, Para. 1 of the Patent Law.	
	Claim(s)		• •	Article 33 of the Patent Law.	
	Claim(s)		the Implementing I	with the provisions of Rule 13, Para. 1 of Regulations of the Patent Law.	
	Claim(s)		does/do not comply with the provisions of Rule 2, Para. 1 of the Implementing Regulations of the Patent Law.		

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_	laims 1 aim(s) aim(s)	, 2, 7,	8, 14-16,	do not comply with the provisions of Rule 20 of the Implementing Regulations of the Patent Law. does/do not comply with the provisions of Rule 21 of the Implementing Regulations of the Patent Law. does/do not comply with the provisions of Rule 22 of the Implementing Regulations of the Patent Law.
☐ Cla	aim(s)			does/do not comply with the provisions of Rule 23 of the Implementing Regulations of the Patent Law.
In	nplement	ing Regul	ations of th	ot comply with the provisions of Rule 43, Para. 1 of the ne Patent Law.
Por detail and	alysis of	noove con	cinsions o	f the Action, see the Text of this Notification.
☐ The appli ☐ The application ☐ The application ☐ The appli	icant show icant show eation who on will no ication c	ald make a uld make ere are de t be issued ontains ne	unendmen arguments ficiencies a la patent. o allowabl	the Examiner is of the opinion that:  ts as directed in the Text of this Notification.  in the response to the Notification and make amendments to as pointed out in the Text of the Notification. Otherwise, the le invention, and therefore, if the applicant fails to submit ent to prove that the application does have merits, it will be
(1) Under Ai months fi	rticle 37 ( from the c	of the Pate date of rec	ent Law, the	eration by the applicant in making the response: ac applicant should respond to the office action within four (4) Notification. If, without any justified reason, the time limit med to have been withdrawn.
(2) Any ame Patent La	endments iw. Sub	to the app stitute pag	olication sh ges should	hould be in conformity with the provision of Article 33 of the be in duplicate and the format of the substitution should be in contained in "Examination Guidelines".
over to th	њ "Recep	otion Divi	ation and/e sion" of Pa ot have leg	or revision of the application should be mailed to or handed atent Office, and the documents not mailed or handed over to gal effect.
(4) Without a the Patent		tment, the	applicant	and/or his agent(s) shall not interview with the Examiner in
8. This Notific				and following attachments:

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Text of the First Office Action

Application No.: 2004800159493

The present application relates to a nitride semiconductor light emitting device for

improving a light output and reliability. After examination, the following comments

are presented hereby:

1. The technical solution claimed in claim 38 does not possess novelty under Article

22, Para. 2 of the Chinese Patent Law. Reference document 1 (KR2002-0079659A)

discloses a nitride light emitting device, and it particularly discloses the following

technical features: "the light emitting device comprises: n-type electrode contact GaN

layer 22; an active layer 23 for emitting light formed above the n-type electrode

contact GaN layer 22; a p-type GaN layer 24 formed above the active layer; a n-type

electrode contact GaN layer 25 formed above the p-type GaN layer to have a super

lattice structure" (see Figure 3 and the abstract of the reference). It can be seen that,

D1 has disclosed all the technical features of the claim, both the technical solutions

are the same. And the technical solution disclosed in D1 and that claimed in the claim

38 belong to the same technical field, solve the same technical problem, and bring

about the same technical effect, thus the technical solution sought for protection in the

claim 38 does not possess novelty.

2. Independent claim 37 relates to a nitride semiconductor light emitting device.

Independent claims 1, 24, 34-36 also relate to a nitride semiconductor light emitting

device. The same or relevant technical feature contained in the two groups of claims is

"a first electrode contact layer", but this feature belongs to the conventional technical

means in the field. Thus the claims are impossible to contain the same or relevant

technical features that define a contribution which the invention makes over the prior

art, and obviously do not possess unity, and which fail to comply with the provisions

of Article 31, Para. 1 of the Chinese Patent Law.

3. The "cluster layer" in claims 1, 7, 8, 14, 15, 24, 25, 32-36 is unclear. "Cluster

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layer" neither is the standard term in the art nor has been exactly defined in the description by the applicant. Therefore, the specific meaning of the "Cluster layer" is indefinite, it is unclear that by which substances the "Cluster layer" is formed and how the "Cluster layer" is formed. Thus claims 1, 7, 8, 14, 15, 24, 25, 32-36 fail to comply with the provisions of Rule 20, Para. 1 of the Implementing Regulations of the Chinese Patent Law,

4. The "SiN<sub>a</sub>" in claims 8, 14, 15, 25, 32-26 is unclear. The expression manner thereof is not the standard expression in the art, the meaning and the specific value range for the subscript "a" are unclear. The applicant should state clearly the meaning thereof in the claims, thus claims 8, 14, 15, 25, 32-26 fail to comply with the provisions of Rule 20, Para. 1 of the Implementing Regulations of the Chinese Patent Law.

#### 5. (omited)

6. The expression "(In<sub>x</sub>Ga<sub>1-x</sub>N/In<sub>y</sub>Ga<sub>1-y</sub>N super lattice)/n-GaN layered structure" in claim 16 is improper; the parentheses herein should be canceled. It can be written as "layered structure formed by In<sub>x</sub>Ga<sub>1-x</sub>N/In<sub>y</sub>Ga<sub>1-y</sub>N super lattice and n-GaN", in order to comply with the provisions of Rule 20, Para. 1 of the Implementing Regulations of the Chinese Patent Law.

- 7. The parentheses appeared in claim 23 should be deleted, and the claim can be expressed as "wherein 0<x<0.1" instead, in order to comply with the provisions of Rule 20, Para. 1 of the Implementing Regulations of the Chinese Patent Law.
- 8. The "p-nitride" in claim 33 should be amended into "p-type nitride", in order to comply-with the provisions of Rule 20, Para 1 of the Implementing Regulations of the Chinese Patent Law.

Based on the above reasons, the present application cannot be granted according to

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the current text, the applicant should make amendment to the application documents in order to overcome the defects therein, and make arguments for the inventiveness and novelty of the amended claims over the reference document. Any amendment to the application documents should comply with the provisions of Article 33 of the Chinese Patent Law, and it cannot go beyond the scope of the original claims and description. In the meantime, please note that, according to the provisions of Article 38 of the Chinese Patent Law, if the amended text still possesses the defects stated in Rule 53 of the Implementing Regulations of the Chinese Patent Law as pointed out in the Office Action, the present application will be rejected.

**Examiner: CHEN LONG** 

Code: 95A7